

# BERNINA®



**BERNINA®1001**  
Electronic

# Instruction Manual



**BERNINA®1001**  
Electronic

# IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic safety precautions should always be followed, including the following:  
Read all instructions before using this sewing machine.

## DANGER

To reduce the risk of electric shock:

1. An appliance should never be left unattended when plugged in.
2. Always unplug this appliance from the electric outlet immediately after using and before cleaning.
3. Always unplug before relamping. Replace bulb with same type rated 15 Watts.

## WARNING

To reduce the risk of burns, fire, electric shock, or injury to persons:

1. Do not allow to be used as a toy. Close attention is necessary when this appliance is used by or near children.
2. Use the appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the appliance with any air openings blocked. Keep ventilation openings of the sewing machine and foot controller free from accumulation of lint, dust, and loose cloth.
5. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
6. Always use the proper needle plate. The wrong plate can cause the needle to break.
7. Do not use bent needles.
8. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
9. Switch the sewing machine off [ ] when making any adjustments in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, and the like.
10. Always unplug sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.
11. Never drop or insert any object into any opening.
12. Do not use outdoors.
13. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
14. To disconnect; turn all controls to the off [ ] position, then remove plug from outlet.
15. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.

## GROUNDING INSTRUCTIONS (for U.S.A. only)

This product must be grounded. In the event of malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

## DANGER

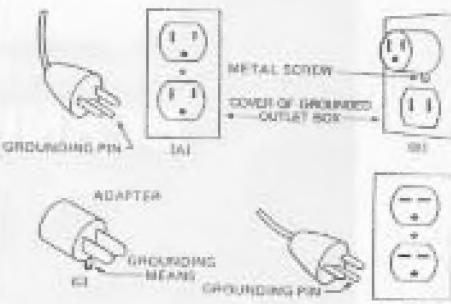
Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded.

Do not modify the plug provided with the product - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This product is for use on a nominal 120V circuit, and has a grounding plug that looks like the plug illustrated in sketch A. A temporary adaptor, which looks like the adaptor illustrated in sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in sketch B if a properly grounded outlet is not available. The temporary adaptor should be used only until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear lug, and the line extending from the adaptor must be connected to a permanent ground such as properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by the metal screw.

### GROUNDING METHODS



## SAVE THESE INSTRUCTIONS

The sewing machine is intended for household use only.

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Practical sewing	

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Dear BERNINA Customer

Congratulations on choosing a BERNINA 100! You are now the proud owner of a sewing machine which fulfills every expectation in terms of use and quality. You own a first class product which will give you sewing pleasure for many years to come.

Some hundred years ago, my great grandfather invented the first ever domestic machine. This was the beginning of the BERNINA family business and I am proud to be the fourth generation member of the family to have responsibility for the company. I am delighted to welcome you to the millions of satisfied BERNINA owners around the world.

If you require any further information about your sewing machine or sewing in general, please do not hesitate to contact your BERNINA dealer, who will be delighted to help you.

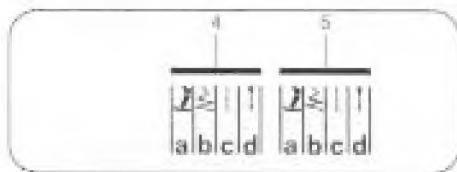
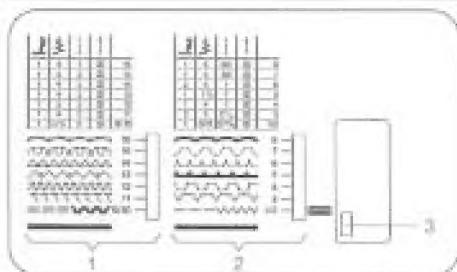
I wish you very happy and successful sewing.

Yours truly,

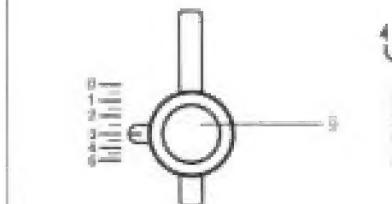
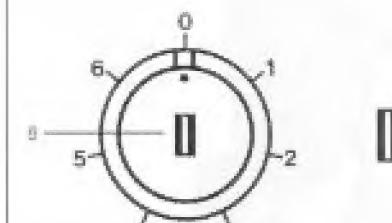
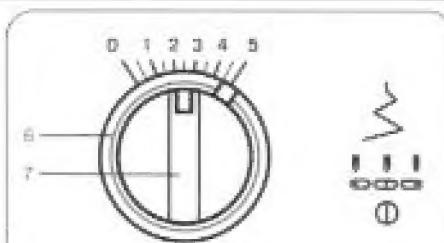
Hanspeter Ueltschi  
President

**BERNINA®**

## Display/Control panel



- 1 Red stitch programme
- 2 Green stitch programme
- 3 Selector lever
- 4 Basic setting panel, red stitches
  - a Presser foot
  - b Stitch width
  - c Stitch length
  - d Needle position
- 5 Basic setting panel, green stitches
  - a Presser foot
  - b Stitch width
  - c Stitch length
  - d Needle position
- 6 Stitch width knob
- 7 Needle position knob
- 8 Buttonhole knob
- 9 Stitch length knob
- 10 RED - GREEN stitch programme selector knob
- 11 Feed-dog knob



## Details of machine

- 1 Hinged front cover
- 2 Stitch plate
- 3 Presser foot
- 4 Needle clamp
- 5 Thread regulator
- 6 Thread take-up lever
- 7 Pin-tension stud
- 8 Thread tension slot
- 9 Thread tension adjustment knob
- 10 Rod stitches
- 11 Green stitches
- 12 Selector lever
- 13 Bobbin spindle
- 14 Bobbin winder stop
- 15 Handwheel
- 16 Stitch width knob
- 17 Needle position knob
- 18 Buttonhole knob
- 19 Power/light switch
- 20 Stitch length knob
- 21 Securing pins for sewing table
- 22 Stitch programme color indicator  
RED - GREEN
- 23 Combined main/foot control socket
- 24 Stitch programme selector knob
- 25 Sewing/Darning selector knob
- 26 Presser foot lever
- 27 Carrying handle
- 28 Thread guide
- 29 Thread holder pins
- 30 Supplementary thread guide
- 31 Thread cutter



# Setting up the sewing machine

# Cover, accessories



## Cover, accessories

The cover protects the machine from dust and dirt.

The outside pocket provides storage for the instruction manual, foot control and cable.

The machine is very easy to carry with the practical, retractable handle.

## Standard accessories

- Bobbins
- Needle assortment
- Seam ripper
- Small screwdriver
- Special screwdriver
- Bobbin holder
- Cleaning brush
- Oil, filled
- Reverse-pelmen foot
- Overlock foot
- Blind stitch foot
- Buttonhole foot
- Zip foot



## Accessories box

The accessories are neatly stored in the accessories box (Fig. 2).

## Fitting the accessories box onto the machine

The accessories box has two fixing lugs that fit into the base plate of the machine.

## Removing the accessories box

Simply push the accessories box backwards (Fig. 3).

Lay the accessories box onto the base plate from the rear and press against the free arm until the fixing lugs engage in the holes provided (Fig. 4).



## Mains cable, foot control unit, sewing light, power switch



### Connecting mains cable and foot control unit

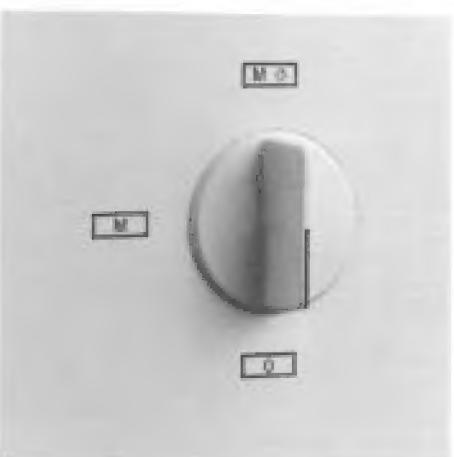
Plug the specially combined mains/foot control cable into the machine. Plug the foot control cable into the foot control and the machine cable into the mains socket.



### Foot control unit

This is used to regulate the sewing speed.

The sewing speed can be controlled from virtually 0 to maximum speed by varying the pressure on the plate of the foot control unit.



### Power switch sewing light

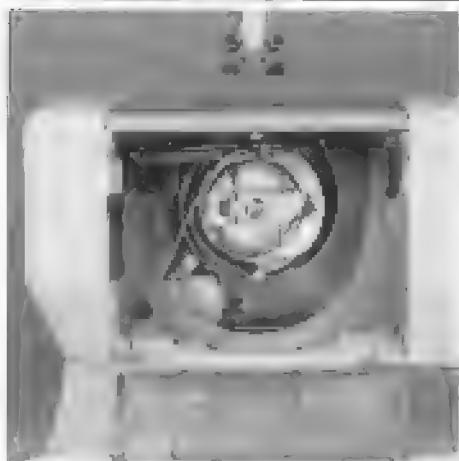
The power switch below the handwheel has 3 positions:

**Off**: The machine is switched off.

**On**: The machine is switched on.

**On with light**: The machine and sewing light are switched on.

# Bobbin case and bobbin, winding lower thread



## Removing the bobbin case

With the power switch off, open the position.

Check that the needle is raised. Open the lever to release the bobbin (Fig. 1).

## WARNING:

Please refer to the safety  
information.



With the power switch off and the needle in the right-hand position, pull the bobbin case back toward you and remove the bobbin case (Fig. 2).

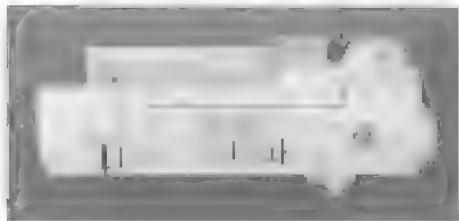


## Winding lower thread

Winding the lower thread with the left hand, turn the handwheel clockwise until the bobbin is wound. Then turn the handwheel counter-clockwise until the bobbin is wound again. Turn the handwheel clockwise to the right, connect the bobbin winder stop. The bobbin winder is now activated.

Lower the presser foot. Hold the bobbin winder stop with the left hand and turn the handwheel clockwise until the bobbin is wound. Turn the handwheel counter-clockwise until the bobbin is wound again. Turn the handwheel clockwise to the right, connect the bobbin winder stop. The bobbin winder is now activated.

When removing the bobbin, hold the bobbin by pulling it to the left against the bobbin winder stop (Fig. 3).



When removing the bobbin, hold the bobbin by pulling it to the left against the bobbin winder stop (Fig. 3).

# Inserting the bobbin



## Inserting the bobbin

PUT the bobbin case in the needle plate.  
Turn the bobbin with the  
needle turning in a clockwise  
direction. See arrow.



Turn the bobbin clockwise until the  
arrow.



Put the thread into the slot  
and under the spring until  
it lies in the slot after  
the eye of the needle.



When the end of the thread  
is pulled the bobbin should  
turn clockwise in the direction  
of the arrow.



## Inserting the bobbin case

Make sure that the needle  
is not in the needle plate  
before removing the bobbin  
case. Turn the bobbin case  
as in fig. 5 and insert.

## Threading the upper thread



### Thread the upper thread

Check that the needle is in the raised position.  
Press the pressure bar.

Push the central button on  
the left thread take-up

Gently clip the thread from  
the upper guide on the left  
of the machine. Then pull it  
through the loop and into  
the thread tension.

### WARNING:

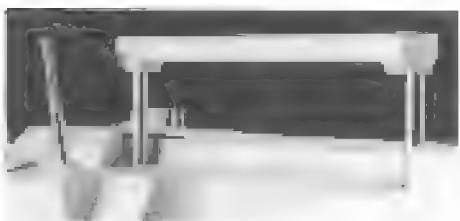
Check regularly the safety  
instructions.



On the front of the magazine,  
wind the thread from the skein  
downwards under the  
thread regulator  $\Rightarrow$ , then up  
to the thread take-up lever  
at the top  $\Rightarrow$  and then  
again to the needle in  
the  $\Rightarrow$  direction.

Remove thread and thread  
tensioner  $\Rightarrow$ .

The pressure bar  $\Rightarrow$ .  
The level of the pressure bar  
is just below after fitting  
the bobbin case.  
Pull the thread upwards  
10 cm (4") through the bobbin  
case eye.



### Supplementary thread guide on handle

With the optional extra thread  
guide on handle, the thread  
can be wound directly onto  
the bobbin.

For proper thread feed  
pull the thread through the  
special take-up lever  
located on the handle  $\Rightarrow$ .

## Bringing up the lower thread, thread tension, feed-dog



### Bringing up the lower thread

Tighten the upper thread loosely. Turn the handwheel clockwise until the thread has taken up lever & fully tensioned.

Pull the upper thread so that the upper thread brought up has gone through each eye hole. Take both threads through the slot in the presser foot and place to the side.



### Thread tension

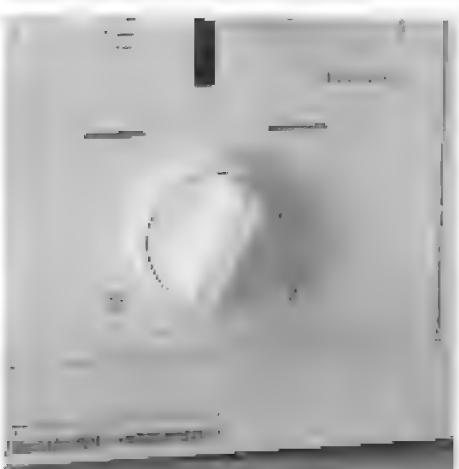
Normal tension is set when the red mark on the regulating dial is located between the two red marks on the machine.

The thread tension should be adjusted for special fabrics such as lace, etc.

Turning the regulating dial clockwise to number 4 or counter-clockwise to number 6 gives proper thread tension.

Turning the regulating dial backwards to number 6 or above gives a taut upper thread.

On the front, the thread tension should remain at normal when special sewing like lace has been completed.



### Lowering the feed-dog

For certain types of work, e.g. darning, the lever must not be moved by the lever. Therefore the feed dog must be lowered by turning the lever to the left until the mark points to the symbol

For all other sewing, the mark on the lever should point to symbol



To turn over the work, raise the crested lift and withdraw it to the rear left and have both threads ready the thread cutter.

The thread cutter may disengage when you close the sewing cabinet.

# Inserting the needle changing presser feet



## Inserting the needle

The small black screwdriver is used to turn the needle clamp. The needle clamp is provided in the accessories set.

Set the power switch to .

Check that the needle is in the correct position and turn the handwheel.

Loosen the needle clamp screw by half a turn (not clockwise) and reinforce the needle. (Fig. 1)

Turn the handwheel in the right direction until the needle

turns the needle counter-clockwise (top left). The needle is now correctly positioned. Turn the handwheel in the opposite direction until the needle turns clockwise (top right).

## WARNING:

Please refer to the safety instructions.



## Changing presser feet

See page 14 for the various presserfeet and their uses.

The new presser foot must be correctly attached to the correct model of sewing machine.

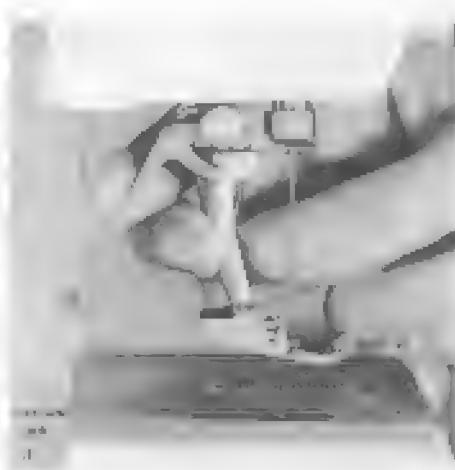
Changing the presser foot is easy and pleasant.

Turn the handwheel clockwise until the needle is fully raised.

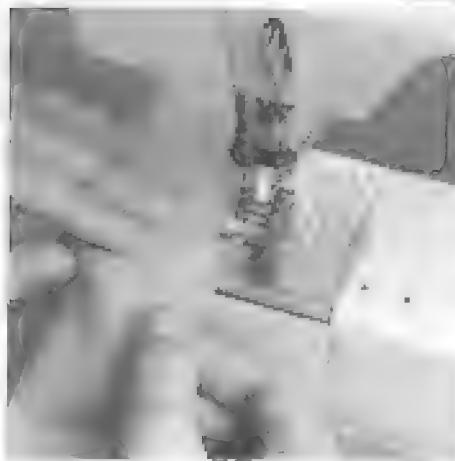
Push the clamping lever (Fig. 2).

Place the clamping lever with the index finger of the right hand and hold the middle finger and thumb to remove the presser foot. (Fig. 3)

To attach the presser foot: The procedure is the same but press the clamping lever down firmly with the index finger. (Fig. 4).



## Sewing tips



### A few hints

**Turn your SINGER 4423** to the left so you can turn the work from the right side with the fingers of the left hand. Turn to the right to turn the work with the fingers of the right hand. Straight from the left or right side, it is much easier to turn the work.

It is preferable you to work in the working area with others.

Ensure you have enough space to work in the working area.

It is easier to judge the work when the sides with the fingers of the left hand are near to the presser foot. This is particularly true when working outside the left or a seam when you let the work slide across the foot.



**Turn your SINGER 4423** to the right so you can turn the work from the left side with the fingers of the right hand. Turn to the left to turn the work with the fingers of the left hand. Straight from the left or right side, it is much easier to turn the work.

# Threads and needles

# Needle table

## Needles and sewing machine

Your Elna 50H/50VA has nonchalance needles. When buying new needles, check that they are the CB/Cb II system.

The needle sizes available range from 70 to 100. The lower the number, the finer the thread. The finer the thread, the higher the number.

## Needle and thread

The needle size required depends on the thread selected. The needle must match the thread. When sewing, the thread lies in the lining groove to the left of the needle (Fig. 1). If the needle is too fine, the thread will run off to the right (Fig. 2) and skipped stitches will result.



## Needle and fabric Condition of needle

The needle must be in good condition. Sewing problems are caused by:

- A bent needle
- A loose thread
- C hooked tips

## Standard needles

Size	Thread	Fabric
70	100% cotton	Lightweight fabrics
80	100% cotton	Medium weight fabrics
90	100% cotton	Medium weight fabrics
100	100% cotton	Medium weight fabrics
110	100% cotton	Medium weight fabrics
120	100% cotton	Medium weight fabrics

## Special needles

Size	Thread	Fabric
100-706 (U-Satin)	Monofilament	Satin fabric
100-707 (Satin)	Monofilament	Satin fabric

Size	Thread	Fabric
100-708 (Satin)	Monofilament	Satin fabric
100-709 (Satin)	Monofilament	Satin fabric

Size	Thread	Fabric
100-706 (U-Satin)	Monofilament	Satin fabric
100-707 (Satin)	Monofilament	Satin fabric

Size	Thread	Fabric
100-708 (Satin)	Monofilament	Satin fabric
100-709 (Satin)	Monofilament	Satin fabric

Size	Thread	Fabric
100-706 (U-Satin)	Monofilament	Satin fabric
100-707 (Satin)	Monofilament	Satin fabric

## Needle/Thread Table

Fabric	70	80	90	100	110	120
Denim, flannel	*	*				
Embroidered jeans 3D		*				
Non-stretch denim		*	*			
Stretch denim		*	*			
Denim trousers, denim		*	*	*		
Denim jackets, denim		*	*	*		
Denim quilted for top stitching	*	*	*	*	*	*

This table shows clearly which needle size suits which thread.

# Feed-dog and fabric feed

## 1. Feed-dog and stitch length

With every stitch, the feed-dog arm moves forward by one step. The length of the step is governed by the stitch length.

With an extremely short stitch length the steps are extremely short. The fabric moves only as the presser foot does. For example, when sewing a vertical straight line with a small stitch length,

## 2. Feed dog and fabric feed

a) The feed-dog arm only works effectively if the presser foot is horizontal.



## 3. Feed-dog and sewing corners

a) The two rows of teeth of the feed-dog arm quite a distance apart because of the width of the needle plate.



b) When sewing corners, only the front part of the fabric is on the feed-dog so I cannot maintain the work correctly.



## Important

Do not push the fabric too evenly!

When pressing long stitches e.g. at a very low setting or turn the feed-dog will be unable to grip the fabric. The work will stick.

b) Pulling or pushing will result in:



c) If the feed-dog is placed against the corner, the feed-dog will be able to do its job properly.



c) Pulling back will result in:



... if you pull back the fabric nearly hidden in the back recess of the seam, because the sewing so that the feed-dog can't grip the fabric.



Presser feet  
Practical stitches  
Practical sewing

## Presser feet

Presser feet are an important sewing aid they can be used with grooves and guides to help you sew straight. Pictures of the correct choice of presserfeet.



**Reverse pattern foot**  
Used and great material  
guides  
for turning hems



**Overlock foot**  
• • •  
With stretch feet  
Overlocking with help



**Buttonhole foot**  
• • •



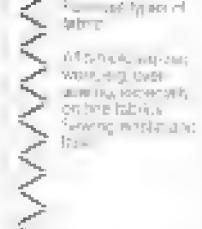
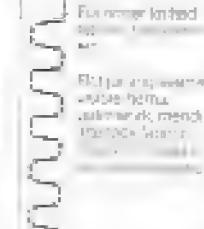
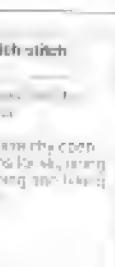
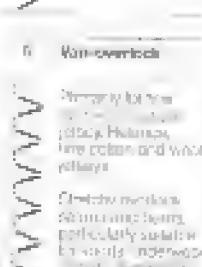
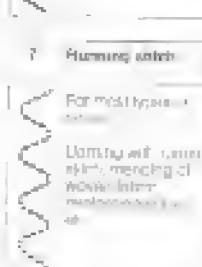
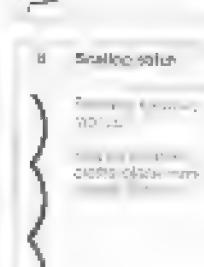
**Zip foot**  
Sewing in zips  
Sewing close piping  
Zig-zag seam



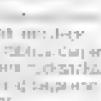
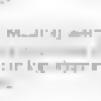
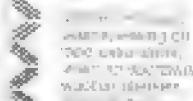
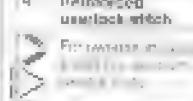
**Blind stitch foot**  
• • •  
• • •

### **Range of applications**

## Green practical stitches

<b>1 Straight stitch</b>	<b>2 Zig-zag</b>	<b>3 Blind stitch</b>	<b>4 Universal stitch</b>
<p>Analogue of hand stitching seams.</p> 	<p>Used for types of seams:</p> <ul style="list-style-type: none"> <li>Wool, silk, cashmere, and the like.</li> <li>Leather.</li> <li>Leaving the fabric loose.</li> </ul> 	<p>For thick, irregular fabrics:</p> <ul style="list-style-type: none"> <li>Blind stitching seams, bagging on wall paper and fine textiles.</li> </ul> 	<p>For thinner fabrics:</p> <ul style="list-style-type: none"> <li>Wool.</li> <li>Fabric, leather.</li> <li>Leather.</li> </ul> 
<b>5 Stretch stitch</b>	<b>6 Van-overlock</b>	<b>7 Hemming stitch</b>	<b>8 Scallop stitch</b>
<p>Analogue of hand stitching seams.</p> <p>Very stretchy open seams for stretching covering and binding areas.</p> 	<p>Primarily for new synthetic fabrics: polyester, polyamide, fibre cotton and wool yellow.</p> <p>Stretchy overlock seams and binding, particularly suitable for stretchy underwear and knitwear.</p> 	<p>For most types of fabrics:</p> <p>Hemming with running stitch, mending of holes, inter- locking with other stitches.</p> 	<p>Analogue of hand stitching seams.</p> <p>Very stretchy seams close to min-</p> 

## Range of applications

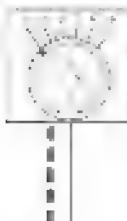
Red decorative stitches			
8	Tricot straight stitch	10	Feather-stitch
	Decorative embroidery method. It looks like a dense grid of squares. Width of 1 square length.		Decorative embroidery method. It looks like a dense grid of squares. Width of 1 square length.
11	Tasselling stitch	12	Double overlock
	Primarily for woven fabrics. It creates decorative vertical ridges.		For all types of fabrics and hand and machine sewing.
13	Edge stitch	14	Reinforced overlock stitch
	Formal type of decorative stitching.		Reinforcement of seams or decorative stitching.
15-16	Duckbill stitches	17	
	Middle-left: narrow edge. Middle-right: wide edge. Right: edges and width.	18	
19		16	

### Straight stitch



#### **Final needle position**

The position of the switch  
can be set to left and right



In the summer with the  
water level down.



Final version

The machine was known as the "electric typewriter" and with the success of this

The mean length is selected  
as  $\bar{x} = 14.1$   
Holding and White

### **Planning our learning**

UML+MVC+Spring Boot

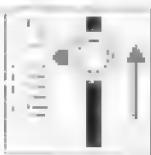
When the switch is released again the machine will automatically return to the previously selected pitch.

第10章

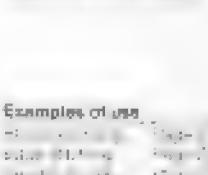
At the beginning and end of a shift, new or revised frequencies, 100-450; and the following:

#### **Securing thick clients**

When changing from forward to reverse sewing and vice versa, stop the machine. The needle should not catch in the fabric.



For normal sewing the  
needle is in the straight



Exercises 1-10

—  
—  
—

## Zig-zag

## Satin stitch

### Setting zig-zag



### Setting zig-zag width and length

The stitch width and length can be altered simultaneously by turning the dial clockwise or counter-clockwise.

The needle must not be left in the work when the machine is stopped.

### Satin stitch = close zig-zag = III

#### Presser foot:

Thread:

Twists:

Stitch width:

Stitch length:

#### ④ Additional accessories:

Stitch width 5  
Stitch length 5

### Oversewing edges

Presser foot	I	II
Thread:	100% cotton	80-100
Twists:	2-4	2-4 (according to fabric)

To sew a straight edge, turn the dial to the right until the needle is at the top. Then pull the fabric to the right and sew along the straight edge. Turn the dial to the left until the needle is at the bottom. Then pull the fabric to the left and sew along the straight edge.

Couple the edge of the fabric to the outside of the foot so that the needle pierces the fabric and then over the edge.



Set stitch length to very close zig-zag = III

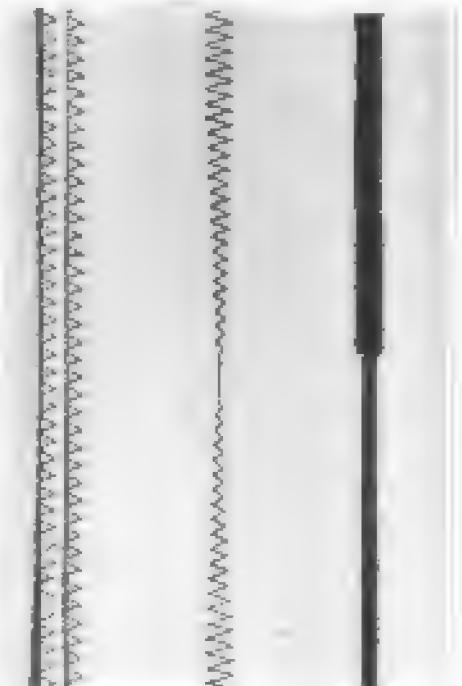
Set stitch width from the right until it looks like this:

The result: the knot is on the zig-zag.

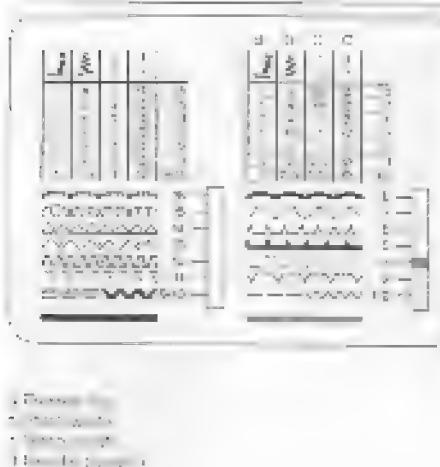
Zig-zag is now F

By dialing half a turn to the left instead of the right in the basic setting for satin stitch, it becomes = III.

Adjust the stitch width from the basic setting according to the fabric and thickness. In this case, 200% cotton fabric.



# Selecting green stitches



For the basic setting  
the green number  
selected.

... For example, if the  
green...

The number for the basic  
setting is the same as the  
number of the stitch  
selected.

For example, if the  
green number selected  
is 1, the basic setting  
will be the first  
stitch in the  
selected group.

## Universal stitch



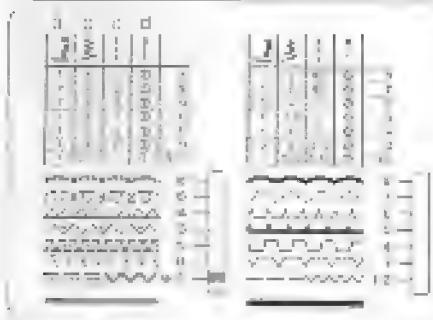
## Blind stitch



## Vari-overlock



# Selecting red stitches



- A Presser foot
- B Stitch width
- C Stitch length
- D Needle position

Push the selector lever to the right to disengage and select a stitch from 1 to 12.

Set the dial variable to red.

The number for the basic setting is the same as the number of the stitch selected.

Each stitch has many different applications. Thread width and length can be adjusted to the type of work and fabric.

The presser foot down, the needle is in the position indicated for every work and position required.

## Triple zig-zag

Stitch width	1
Stitch length	2
Needle position	0
Level 1	0
Colour code	red

## Towelling stitch

Presser foot	1
Stitch width	1
Stitch length	2
Needle position	0
Level 1	0
Colour code	red

## Double overlock

Stitch width	1
Stitch length	2
Stitch range	1
Needle position	0
Level 1	0
Colour code	red



## Sewing knitted fabrics

e.g. interlock, jersey  
1. Cut a piece of fabric  
following the following points  
and sew it:

1. Use a pattern or  
piece of garment as  
a guide for cutting.
2. Use a sharp pair of  
scissors or a rotary  
cutter and a straight  
edge to cut the fabric.

3. Use fine sewing thread  
(otherwise knitting projects  
cannot be removed  
from the needle).

4. Use sewing thread for  
sewing. After the seam has  
been sewn, it can easily  
be removed, than the considerably  
thicker and sharper fibres  
of the knit.

5. Press each seam as it is  
sewn. This will make subsequent work easier.

6. Sew a sample to test the  
strength of the seam. The  
seam should be as strong  
as the fabric. As modern  
fabrics with spandex elasticity in  
knit fabrics, the tension setting  
of the machine may have  
to be adjusted where  
necessary to suit the fabric  
strength for sewing knit.

## Zips

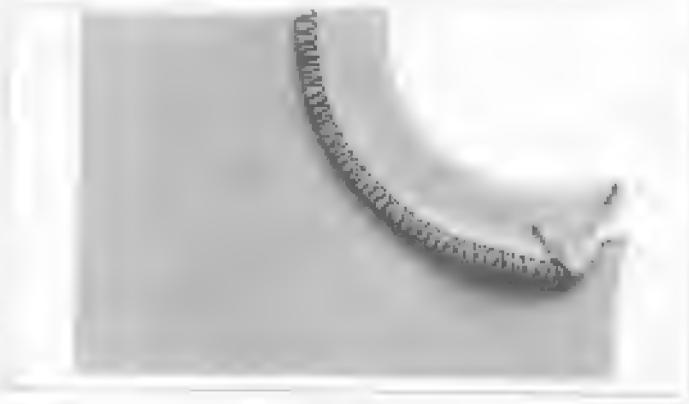
### Neckband with overlock seam

1. Prepare the  
neckband:  
- Cut  
- Pin  
- Fold  
- Press  
- Overlock  
- Turn  
- Press  
- Insert

2. Prepare the garment:  
- Cut  
- Pin  
- Fold  
- Press  
- Overlock  
- Turn  
- Press  
- Insert

### Final steps

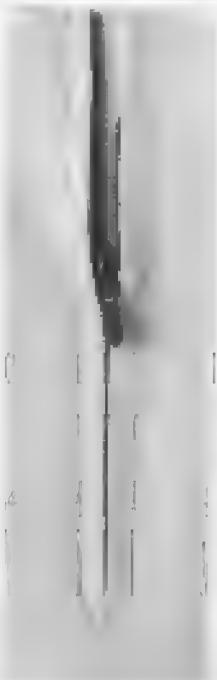
1. Fold the garment in half  
lengthwise so that the  
zipper is on the front side.  
2. Insert the neckband into  
the garment. The zipper  
should be positioned  
so that it is hidden  
between the two parts  
of the garment.



### Sewing in size

Zip fastener  
Inserted flat

Presser foot	4
Thread	medium
Needle	60
Sitch	-
Sitch width	0
Feed dogs	up
Presser bar lifter	up
Throat plate	up
Foot pressure	normal



### Preparation:

Seam allowance of seam  
More length of zip will be  
needed for an open  
opening. Remove elastic  
tubes.

Stitch item and oversew.  
Position along wrong sewing  
surface. Stitch in a zig-zag  
position so that the teeth  
are covered by the fabric.  
Sew in the zip, starting each  
stitch in the same place.  
Sew in the zip, starting each  
stitch in the same place.  
Sew in the zip, starting each  
stitch in the same place.

# Practical stitch hems

## Preparation

Cut off the hem allowance  
and turn under the raw edge.  
Pin the hem in place.  
Sew the hem.

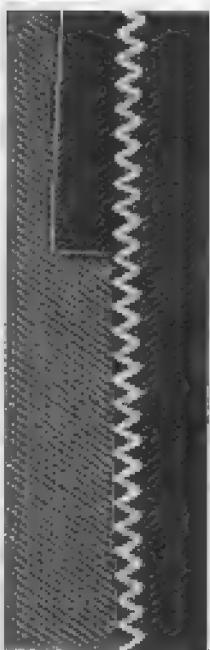
## Visible hem with

### Overlock

#### Equipment

Overlock	sew-on three
Scissors	scissors
Presser foot	overlock
Presser bar	overlock
Sewing speed	right
Sewing width	overlock
Thread color	overlock

Turn the hem allowance  
under and sew it with the  
overlock.



## Visible hem with

### Triple zig-zag

#### Equipment

Overlock	sew-on three
Scissors	scissors
Presser foot	overlock
Presser bar	overlock
Sewing speed	right
Sewing width	overlock

Turn the hem allowance  
under and sew it with the  
overlock.



## Visible hem with

### Universal stitch

#### Equipment

Overlock	sew-on three
Scissors	scissors
Presser foot	overlock
Presser bar	overlock
Sewing speed	right
Sewing width	overlock

Turn the hem allowance  
under and sew it with the  
universal stitch.



# Practical stitch seams

There are two types of seam:

## Open seams

- fabric edges are visible
- pressed open
- they're flat and can not bulge
- they're strong and durable

## Overlock seams

- fabric edges are covered
- they're stretchy
- they're quick to make
- they're good for joining elastic

## Flat joining seams

These are seams in which the raw edges are covered.

- flat
- strong
- good for joining
- good for stretch fabrics
- good for elastic

## Triple straight stitch seam

### open seam

Thread:  D  
Needle:  100

### Overlock tool: 1

Scissors:  1

Presser foot:  1

Sewing speed:  100

Stitch width:  0

Stitch length:  3

Needle position:  centre

Feed dog:  sewing

Colour indicator:

## Dog-leg seam

### open seam

Thread:  D  
Needle:  100  
Scissors:  1

Overlock tool:  1

Presser foot:  1

Sewing speed:  100

Stitch width:  0

Stitch length:  3

Needle position:  centre

Feed dog:  sewing

Colour indicator:

## Stretch seam

### open seam

Very stretchy seam for  
stretch fabrics — especially  
for waistbands of all kinds

Suitable also for lounge  
fabrics, velour and

Overlock tool:  D  
Scissors:  1

Needle:  100

Presser foot:  1

Sewing speed:  100

Stitch width:  1%

Stitch length:  3

Needle position:  centre

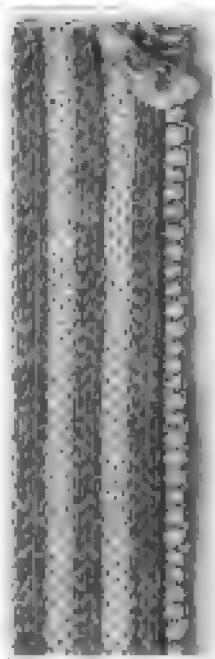
Feed dog:  sewing

Colour indicator:

# Practical stitch seams

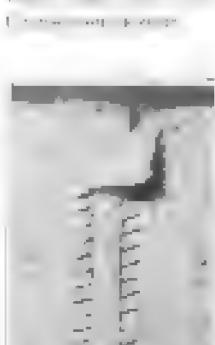
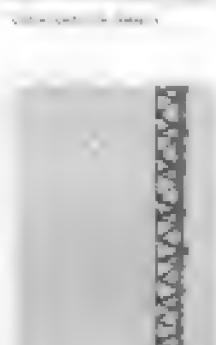
## Overlock seam

Stretchy overlock seam for all thin jerseys (Wings)	check blouse, under- wear, knit dress, etc.
Presser foot:	2
Sewn:	AAAABBAABBAABBA
Stitch width:	4
Stitch length:	1
Feed dog:	top
Colour:	grey



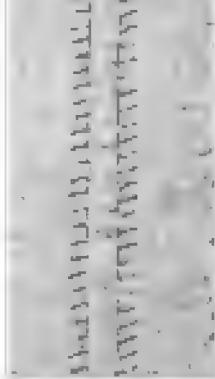
## Double-overlock seam

Decorative overlock seam for thicker or looser fabrics	check fabric
Presser foot:	check
Sewn:	ABCBDCBDCBDCBDC
Stitch width:	5
Stitch length:	2
Needle position:	middle
Feed dog:	top
Colour:	grey



## Ribbed overlock seam

Decorative overlock seam for ribbed, stretchy, and puffed fabrics	check fabric
Presser foot:	1
Sewn:	ABCBDCBDCBDCBDC
Stitch width:	8-
Stitch length:	2
Needle position:	middle
Feed dog:	bottom
Colour:	grey



## Rib seam

Wool fabric - by hand	www.woolinfo.com
-----------------------	------------------

Presser foot:	check
Type:	check
Stitch width:	1
Stitch length:	2
Feed dog:	bottom
Colour:	grey

## Reminder

- Only one thread for each Road 20

www.woolinfo.com

www.woolinfo.com

#### **Sewing table/special accessories**

## Introduction

19. The following are the main features of the new system:

## **Programs**

19. 19. 19. 19.

#### **Punctuating the hymn**

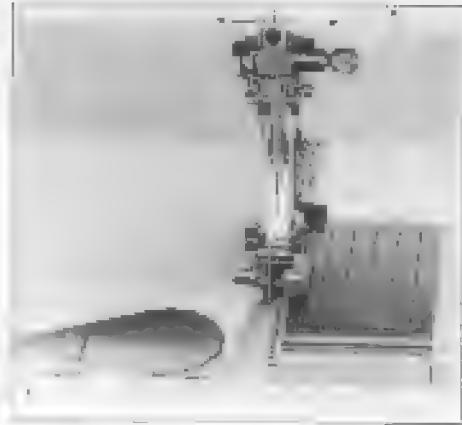
The following diagram  
shows the last mentioned  
case.

**Browsing tool**  
A filter or a feature by  
which an end user can  
filter items.  
Glossary: Browsing tools  
allow users to search and  
filter content. They are  
able to show a user personalized  
content based on their  
interests and preferences.  
When a user is looking for  
books in a library, they can  
use the filters of the library.  
Because of these functions,  
design requirement may be

Slowly, until the needle swings to the left, drop the bobbin case.

Whenver the needle is going in too far and a little wood is taking in early sufficiently.

Then the rest of the  
stitch in the same way.  
Then sew for approximately  
16 cm (4½") arc croch- agar.



Building that works

In this way, you can check  
that the helmet is running  
smoothly.  
When you turn your head,  
the helmet turns slightly  
(Fig. 2).



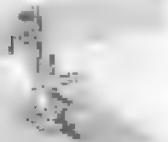
# Edge stitching using the needle positions

Edge stitching on collars,  
collar stays, hems, etc.

Presser foot:	5
Stitch length:	2-5 mm (see opposite)
Stitch width:	0
Needle position:	left (all left)
Foot pressure:	medium

## Sewing table/additional accessory

Presser foot: 5  
from the left. Set the  
guide on the 8 mm stitched  
(Fig. 1). Set the needle pos-  
ition to the far left.



Top stitching for edges of  
collars

Presser foot:	7
Stitch length:	2-5 mm (see opposite)
Stitch width:	0
Needle position:	45% (45°/90°)
Foot pressure:	medium

Presser foot: 7  
from the right. Set the  
needle position to the  
far right.

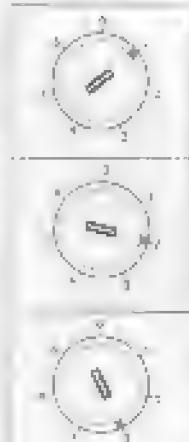


## Whipping

- Line 1 = 1 cm (2")
  - Line 2 = 1.5 cm (5/8")
  - Line 3 = 2 cm (4/5")
  - Line 4 = 2.5 cm (1") (Fig.)
  - Line 5 = 3 cm (1 1/8")
- It is also possible to sew  
overcast with the using  
the left, left/let, right and  
right/let needle positions.

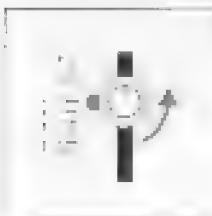


Scissors \_\_\_\_\_  
Threads \_\_\_\_\_  
Needles \_\_\_\_\_  
\_\_\_\_\_  
Fabric, yard(s) \_\_\_\_\_  
  
Stitch length \_\_\_\_\_  
Tension \_\_\_\_\_  
Fabric type \_\_\_\_\_  
  
Color index/color \_\_\_\_\_



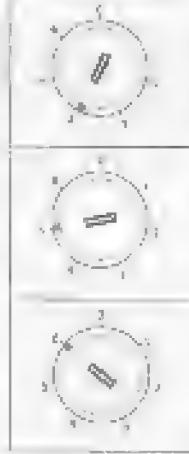
### Sewing the buttonholes

For showing behaviour  
on investment by  
SMEs. 



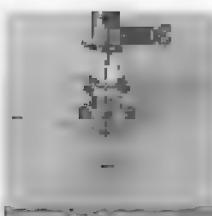
**Set stitch length:** Turn knob 1 clockwise to 10. The mark will be at the far end. 2. Seton right to C. By holding half a turn to the left you get the tallest line. 3. Turn the dial clockwise for underneath a continuous 3rd line. The stitch density decreasing as the fabric turns and clockwise and back. Note: It is recommended not to have tension.

Admiralitetskatten er et land-kunstver-

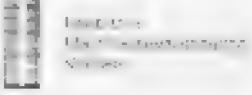
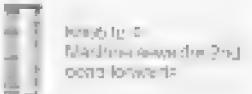
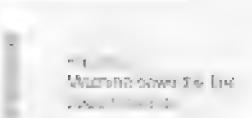
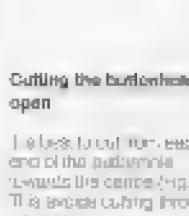


## **Fundación bambú nihokini**

Panel A only to 1. The sewing sequence continues as described. For all other sewing, see step 10.



Turn the board upside the board so that the edge of the board is at the front of the passenger boat. Lower the boards until the tables are evenly at the front of the passenger boat. Turn the butterboard to make



# With gimp cord

## Battening with gimp cord

The gimp cord is  
used to reinforce  
the seam. It is  
placed in the  
seam before it is  
stitched.

The gimp cord is especially  
convenient for all seam  
finishes requiring hand  
and machine work. It  
permits the seam to be  
finished without shaping.

The thickness of the cord  
depends on the type of fabric  
being battened down.  
For light fabrics, hand  
seams, etc., use 1 mm  
cord. For heavy fabrics  
use 2 mm cord.

To attach the gimp cord  
to the fabric, lay the cord  
over the seam and  
pin it in place.

Stitch the seam with  
the gimp cord attached.

The cord need not be  
battened down. It  
can be left loose.

## Sewing with gimp cord

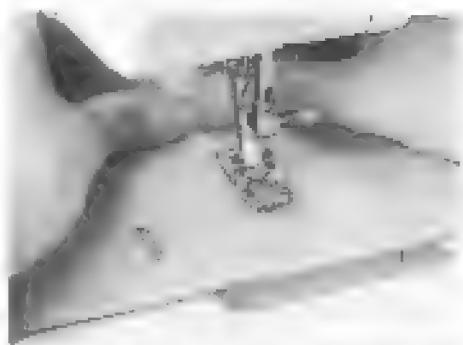
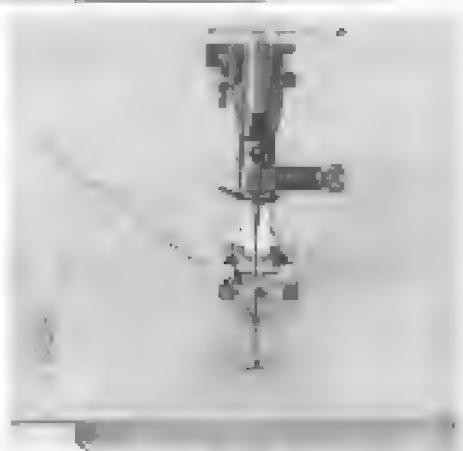
When sewing with  
gimp cord, the  
needle must be  
lowered.

Using the needle  
lowered, sew the  
gimp cord into the  
seam. Turn the  
handwheel toward the  
needle into the fabric  
and then turn it back  
again.

When sewing with  
gimp cord, the  
needle must be  
lowered. Turn the  
handwheel toward  
the needle into the  
fabric and then turn  
it back again.

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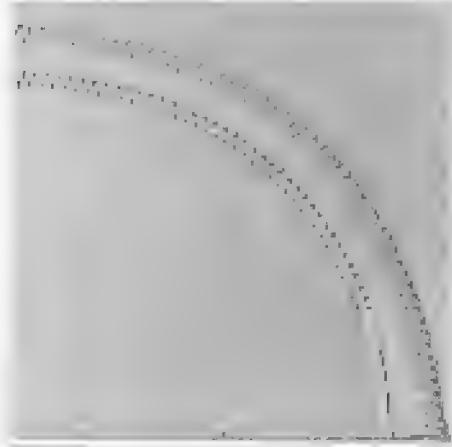


## Mending interlock fabric

### Patching

Presser foot:	1
Sewing speed:	100
Stitch width:	2.5
Stitch length:	approx. 1 1/8"
Needle position:	center
Thread:	any
Scissors:	any

Can also be sewn with the Universal seam.



Cut out a patch 1" possible from the round part of a ribbed seam and 1" wide. Where possible, round off the corners. Please note that elasticity in gel determines. Pin on the patch and have as close as possible to the hole. Then sew with 1-2 mm. If necessary, do not do possible sewing in thinner elastic areas.

Finally, cut away trim/worn piece from behind patch.

Then cut out a new piece of fabric and sew it on top of the previous one.

## Mending woven fabric

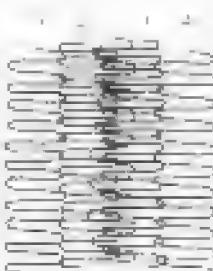
### Mending holes using Running stitch

(Modern damming method)  
In teams and thin webs can  
reinforce all fabrics.

Presser foot:	7
Sewing speed:	100
Stitch width:	1/8"
Stitch length:	1/8"
Needle position:	center
Thread:	any
Scissors:	any
Scrap fabric:	any



Always use a straight stitch  
or zig-zag 1/8" and  
sew over the hole with  
several different adjacent  
rows to cover up each row  
overlapping the previous one  
very slightly.



# Troubleshooting Maintenance

# Fault prevention

If the sewing machine does not sew properly, this usually due to incorrect set-up.

## Check whether:

- The upper and lower threads are correctly tensioned.
- The needle has been correctly seated with the bevel of the shank to the rear.
- The needle scars are correctly seated with the needle and thread tensioned.
- The machine is clean. Brush away any thread remains.
- The base case is clean and unsoiled.
- Any remains of thread are trapped between the lower tensioner and beneath the bottom case spring.

## Upper thread breaks

- The upper thread tension is too tight.
- The upper thread is not correctly tensioned. Tensioning is incorrect or the tensioner is faulty.
- The upper thread is too thin.
- The upper thread is too thick.
- The upper thread is not correctly tensioned.
- The upper thread is not correctly tensioned.
- The upper thread is not correctly tensioned.

## Lower thread breaks

- The lower thread tension is too tight.
- The bobbin is jamming in the bottom case.
- The hole in the tension plate has been damaged by the needle. This must be corrected by a service agent.
- The needle is bent or bent.

## Needle breaks

- Needle clamp screw not tightened enough.
- The needle is pulled backwards instead of backwards under the presser foot.
- When sewing over a thick area, the fabric was pulled while needles still in the fabric.
- Presser foot pressure is too great.

## Machines fails to run

- Plug is not inserted correctly.
- Machine is not connected to power.
- Machine gummed up by use of incompatible oil. Machine will have to be cleaned by a BERNINA dealer.
- Machine has been running for a long time.

## Faults in sewing

- Hemstitch or ripples between the thread tension unit.
- The thread is caught under the bottom case spring.
- The needle is bent or broken in the bottom case finger.
- Tensioned with tool down.
- Incorrectly tensioned. Check lower and upper tensions.

## Skipped stitches

- Thread tension is too high.
- The needle is bent, bent.
- The needle is not correctly tensioned.
- The needle part does not cut the fabric being sewn. If necessary, use ball point, ball point fabrics and cutting point for sewing.

## Important

If you have no been able to rectify a BERNINA dealer, please always take the original tool and accessories.

## Changing the bulb



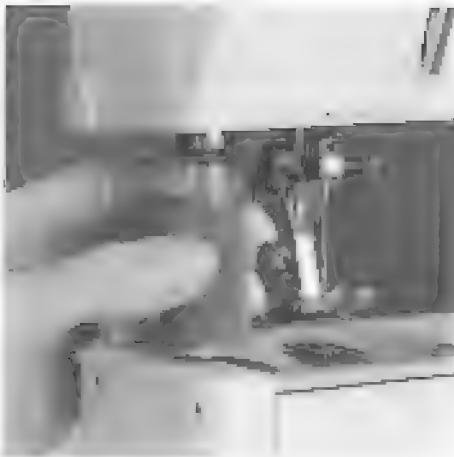
### WARNING:

• Before changing the battery, turn off the power.

Safety lamp  
2xUV 15Watt

#### Changing the bulb

• Disconnect the main fuse before performing - take the plug out of the socket.  
Using the special bulb holder, press the bulb up, twist it firmly left and remove.



• Insert new bulb:  
• Turn the new bulb in the  
holder right  
• Press the bulb into the  
socket. Please always begin  
twist to the left when to avoid  
over-tightening.

# Maintenance: Cleaning and oiling



If the tool has been stored in a cold room, it should be brought to a warm room again, and given time to heat up, because the oil in the bearings may have solidified.

## WARNING:

Do not use the tool if the oil is too cold.

### Cleaning and lubricating the hook

- Turn the handle clockwise until the hook is free from the ground.
- Check that the hooklock is open.
- Remove the hook lock.
- Open the trigger tool and turn the handle clockwise until the hook is free from the ground.

1

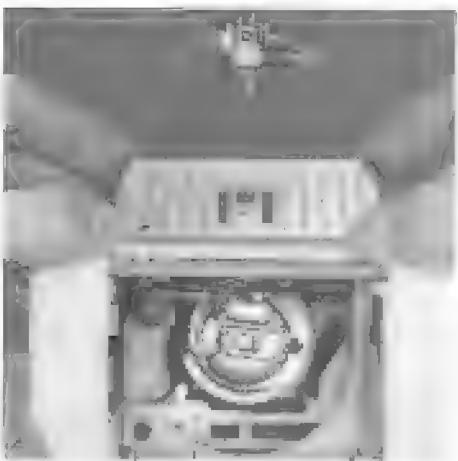
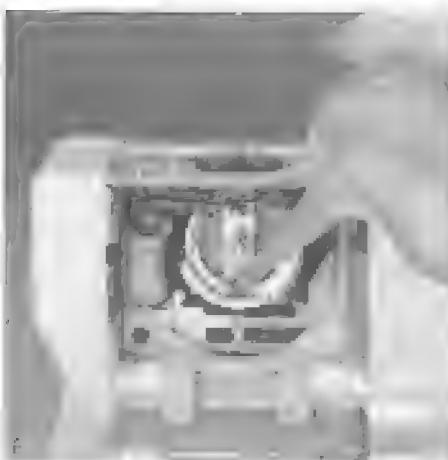
- Using both hands, lift the side plate upwards.
- Take out the side plate.
- Clean the cleaning products off the side plate and hook.

2

- Turn the handle clockwise until the hook is free from the ground.
- Close the trigger tool.

3

- Insert the side plate until the slot has been inserted, push firmly to lock the trigger.
- Close the trigger tool or the hook arm.
- Turn the hook-lock clockwise until it clicks.



# Bernina Publications

# BERNINA publications

We not possible to cover more than the basics of sewing in an instruction manual. But the creative potential of your BERNINA sewing machine and BERNINA-E will take no boundaries. To help you use your machine to its best, BERNINA regularly publishes a magazine which covers everything from simple techniques to advanced fashion projects. Your BERNINA dealer will be delighted to give you more information.

## Bernina Service Letters

Each issue of our BERNINA Service Letters contains a particularly sewing technique presented in easy-to-follow steps. Success is guaranteed!

## BERNINA Creative Sewing

For over 10 years now, the *Creative Sewing* magazine appears twice yearly. Features include decorative sewing in jeans and jeans and - just like you are all regular jeans - the latest fashions which are reflected in the sewing projects we do not fail to meet in words and pictures. Showcasing may make jeans and jeans look like high-end fashion collections all over the world. Read about new sewing developments and trends in the journal of your own home. The *Creative Sewing* magazine also features regular reports from around the world. Enjoy your *Creative Sewing* and learn new things from the magazine of your machines.

## BERNINA Collection

The *Collection* is a special publication which is published twice yearly. It is a magazine for BERNINA collectors. It contains information about the history of BERNINA, the development of the machine, the collection of BERNINA and many other news and the like. Turn you into a sewing pro in no time at all. They are sold at bookstores in three parts. Part one focuses on the history of BERNINA while the second part is extended.



# Index

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## WARNING:

Before using your sewing machine, please read the Safety Instructions.

Sollte diese Maschine in ein anderes Sprachgebiet verkauft werden, fordern Sie beim nationalen Importeur oder BERNINA Händler eine Bedienungsanleitung in der entsprechenden Sprache an.

If this machine has been purchased in a foreign country, please request an instruction manual in your own language from the national Importer or a BERNINA dealer.

Si cette machine est vendue dans une autre région linguistique, demandez à l'importateur national ou à l'agent BERNINA, un manuel d'instructions dans la langue correspondante.

In caso questa macchina fosse venduta in un territorio di lingua diversa si prega di richiedere il libretto d'istruzione nella lingua adeguata presso l'importatore nazionale oppure presso un rivenditore BERNINA.

Si esta máquina se vende en otra región lingüística entonces pida Vd. de su importador nacional o del representante BERNINA un manual de instrucciones en el idioma correspondiente.

Indien deze machine in een ander taalgebied werd gekocht, kunt u bij de nationale importeur of BERNINA vakhandelaar een handleiding in de overeenkomstige taal aanvragen.

Skulle denne maskine blive solgt i et andet sprogområde, bedes du henvende dig hos den nationale BERNINA-importør eller en BERNINA-forhandler, hvor du kan købe en brugsanvisning på det ønskede sprog.

Om den här maskinen har köpts i ett annat land, var vänlig beställ en instruktionsbok på Ditt eget språk från importören eller en BERNINAN-återförsäljare.

Er denne maskinen kjøpt i utlandet, kan instruksjonsbok bestilles på ditt eget språk fra BERNINA importøren eller nærmeste BERNINA forhandler.

Tarvittaessa voit tiedustella omakielistäsi käyttöohjekirjaa BERNINA-maahantuojalta tai jälleenmyyjältä.

Se esta máquina foi comprada num país estrangeiro, dever-se-á pedir o manual de instruções naquela língua ao importador nacional ou ao fornecedor da BERNINA.

Αν η μηχανή εξει αγοραστεί σε μια ξένη χώρα, προκεκλω ζητηθεί ενας σύγχρονος λειτουργικός σπηλιών δικής σας γλώσσας από τον γενικό αντιμπόδιον της BERNINA ή από έναν πωλητή της BERNINA.

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